AMENDMENTS TO THE CLAIMS

1. (Currently Amended) An apparatus for interfacing a communication network to ~~an external~~ peer level service delivery element external to the network, the apparatus comprising:

an interface device coupled to the communication network and the ~~external~~ peer level service delivery element external to the network, the interface device comprising a processor adapted to operate responsive to a control program stored within a memory associated with the processor; and wherein the interface device is operable to recognize the ~~external~~ service delivery element, to negotiate a security level between the ~~external~~ service delivery element and the communication network, and to manage access by the ~~external~~ service delivery element to the communication network.

2. (Currently Amended) The apparatus of claim 1, wherein the security level defines a level of access of the ~~external~~ service delivery element to the communication network.

3. (Currently Amended) The apparatus of claim 1, wherein, based upon the security level, the interface device restricts access by the ~~external~~ service delivery element to at least one class of data retained within the communication network.

4. (Currently Amended) The apparatus of claim 1, wherein, based upon the security level, the interface device restricts access by the ~~external~~ service delivery element to at least one internal function of the communication network.

5. (Currently Amended) The apparatus of claim 1, wherein based upon the security level, the interface device terminates access by the ~~external~~ service delivery element.

6. (Currently Amended) The apparatus of claim 1, wherein the interface device provides scalable levels of access to the communication network by the ~~external~~ service delivery element.

7. (Currently Amended) The apparatus of claim 1, wherein the interface device includes restriction criteria associated with varying degrees of authorization to the communication network by the ~~external~~ service delivery element.

8. (Original) The apparatus of claim 7, wherein the restriction criteria comprises one of user based privileges and network operation variables.

9. (Original) The apparatus of claim 1, wherein the interface device is operable to provide one of access control, connectionless integrity, data origin authentication, replay packet rejection and confidentiality services.

10. (Original) The apparatus of claim 1, wherein the interface device includes a tunnel communication mode.

11. (Original) The apparatus of claim 10, wherein the tunnel communication mode comprises of an IP security protocol tunnel mode.

12. (Currently Amended) The apparatus of claim 1, wherein the interface device is configured to recognize a particular ~~external~~ service delivery element.

13. The apparatus of claim 1, wherein the interface device comprises an embedded security layer.

14. (Currently Amended) The apparatus of claim 1, wherein the interface device establishes a security layer between the communication network and the ~~external~~ service delivery element.

15. (Currently Amended) The apparatus of claim 1, wherein the interface device is operable to establish one of a static association and a dynamic association between the ~~external~~ service delivery element and the communication network.

16. (Currently Amended) The apparatus of claim 1, wherein the interface device is operable to establish both a static association and a dynamic association between the ~~external~~ service delivery element and the communication network at the same time.

17. (Original) The apparatus of claim 1, wherein the interface device is operable to provide an action responsive to the security level.

18. (Original) The apparatus of claim 17, wherein the action comprises one of creating a usage accounting record and providing a message.

19. (Currently Amended) The apparatus of claim 1, wherein the interface device is operable to expand access to the communication network by the ~~external~~ service delivery element.

20. (Currently Amended) The apparatus of claim 19, wherein the interface device expands access to the communication network by the ~~external~~ service delivery element subsequent to a renegotiation of the security level.

21. (Original) The apparatus of claim 1, wherein the interface device comprises a translation function.

22. (Currently Amended) A method of interfacing a communication network to ~~an~~ ~~external~~ peer level service delivery element external to the network comprising the steps of:

providing an interface coupled between the communication network and the ~~external~~ peer level service delivery element external to the network,

recognizing the ~~external~~ service delivery element via the interface,

negotiating a security level between the ~~external~~ service delivery element and the communication network, and

metering access via the interface by the ~~external~~ service delivery element to the communication network in view of the security level.

23. (Currently Amended) The method of claim 22, wherein the security level defines a level of access of the ~~external~~ service delivery element to the communication network.

24. (Currently Amended) The method of claim 22, wherein the method comprises, based upon the security level, restricting access by the ~~external~~ service delivery element to at least one class of data retained within the communication network.

25. (Currently Amended) The method of claim 22, wherein the method comprises, based upon the security level, restricting access by the ~~external~~ service delivery element to at least one internal function of the communication network.

26. (Currently Amended) The method of claim 22, wherein the method comprises, based upon the security level, terminating access to the communication network by the ~~external~~ service delivery element.

27. (Currently Amended) The method of claim 22, further comprising scaling levels of access to the communication network by the ~~external~~ service delivery element.

28. (Currently Amended) The method of claim 22, wherein the interface device includes restriction criteria, and wherein the method comprises varying degrees of authorization to the communication network by the ~~external~~ service delivery element in view of the restriction criteria.

29. (Original) The method of claim 28, wherein the restriction criteria comprises one of user based privileges and network operation variables.

30. (Currently Amended) The method of claim 22, the method comprising tunneling data between the ~~external~~ service delivery element and the communication network through the interface device.

31. (Currently Amended) The method of claim 22, wherein the step of recognizing ~~an external~~ peer level service delivery element comprises recognizing a particular ~~external~~ peer level service delivery element.

32. (Currently Amended) The method of claim 22, comprising establishing a security layer between the communication network and the ~~external~~ service delivery element.

33. (Currently Amended) The method of claim 22, comprising establishing one of a static association and a dynamic association between the ~~external~~ service delivery element and the communication network.

34. (Original) The method of claim 22, comprising, in response to a failure to negotiate a security level, providing an action responsive to the failure to negotiate a security level.

35. (Original) The method of claim 34, wherein the action comprises one of creating a usage accounting record, providing a recorded message and linking to a source of additional information.

36. (Currently Amended) The method of claim 22, comprising expanding access to the communication network by the ~~external~~ service delivery element.

37. (Currently Amended) The method of claim 22, wherein the step of expanding access to the communication network by the ~~external~~ service delivery element comprises renegotiating the security level.

38. (Currently Amended) The method of claim of claim 22, further comprising the step of translating data communicated between the ~~external~~ service delivery element and the communication network.